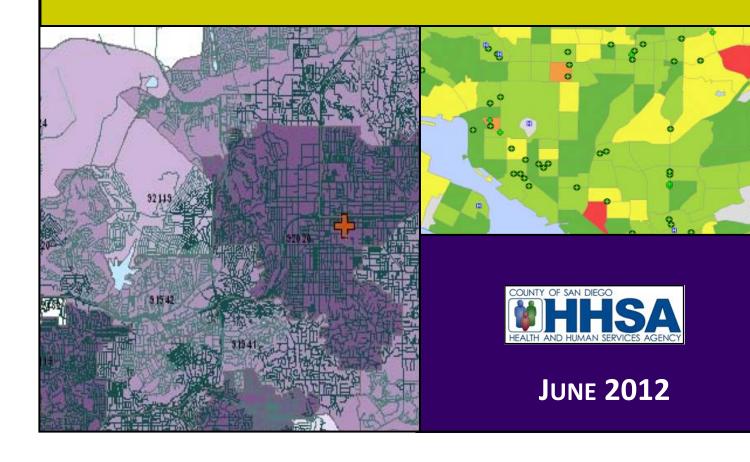


# Chronic Disease Atlas - Stroke San Diego County



### Stroke Medical Encounter\* Rates San Diego County by Subregional Area, by Year

- \*Stroke deaths refer to underlying (single) cause of death, ICD-10 codes I60-I69.
- \*Stroke hospitalizations refer to principal diagnosis, ICD-9 CM codes 430-438.
- \*Stroke emergency department discharges refer to principal diagnosis, ICD-9 CM codes 430-438.

### Medical Encounters\*

**Death Data** is based on underlying cause of death (not multiple causes) and uses ICD-10 codes. Those included are residents of San Diego County with known zip code of residence.

Source: Death Statistical Master Files (CA Department of Public Health), County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch.

**Hospital Data** is based on principal diagnosis and uses ICD-9 CM codes. Those included are residents of San Diego County with known zip code of residence.

Source: Hospital Discharge Data, (CA OSHPD), County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch.

**Emergency Department (ED) Data** is based on principal diagnosis and uses ICD-9 CM codes. ED discharges are those patients treated and discharged from the ED. Patients admitted to the hospital are not included here, but in the hospitalization data. Those included are residents of San Diego County with known zip code of residence.

Source: HASD&IC, County of San Diego, Health & Human Services Agency, Emergency Medical Services, Emergency Department Database.

**Population Data Source:** San Diego Association of Governments (SANDAG), Current Population Estimates, 10/2010.

Data (rates) prepared by County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, from Community Profile.

Maps prepared by County of San Diego, Health & Human Services Agency, Public Health Services, Emergency Medical Services.

### **Contact Information:**

Community Health Statistics Unit 6255 Mission Gorge Road San Diego, CA 92120 (619) 285-6479

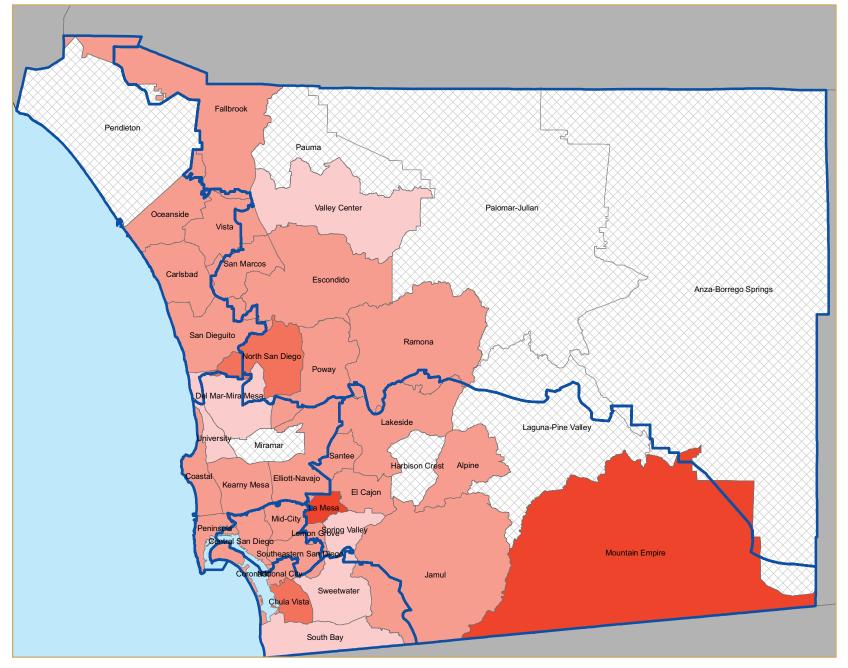
Isabel.Corcos@sdcounty.ca.gov
(Spatial Epidemiologist for EMS)
Alicia.Sampson@sdcounty.ca.gov
(Epidemiologist for CHSU)
Leslie.Ray@sdcounty.ca.gov

(Senior Epidemiologist for EMS and CHSU)

For more detailed explanation of geography, methods, and sources, see online Community Profile at www.SDHealthStatistics.com

## Stroke Death Rates Among San Diego County Residents by Subregional Area

Maps by Year:



Stroke Death Rates, 2000

1.0 - 40.0

40.1 - 80.0

80.1 - 120.0

120.1 - 160.0

120.1 - 100.0

160.1 - 200.0

Data not shown

HHSA Region











Map Date: September, 2010 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429

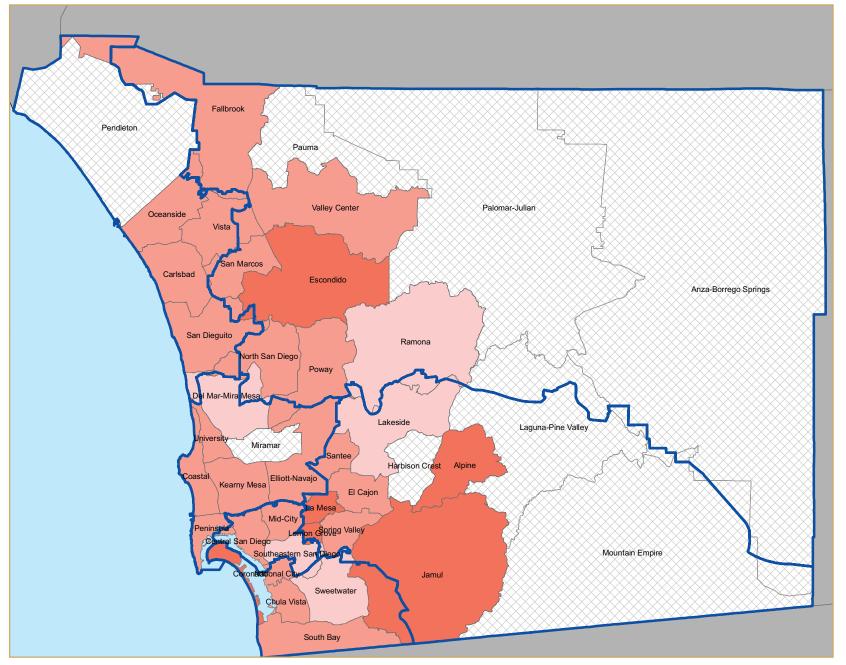
NAD\_1983\_StatePlane\_California\_VI\_FIPS\_0406\_Feet, D\_North\_American\_1983, Foot\_US

Source: Death Statistical Master Files (CA DPH), County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch; SANDAG, Current Population Es imates, 4/24/2009.

<sup>\*</sup> Rates per 100,000 population.

<sup>†</sup> Stroke death refers to (underlying cause of death) ICD-10 codes I60-I69. Stroke is sometimes referred to as Cerebrovascular disease.

<sup>§</sup> Rates not calculated for fewer than 5 events. Rates not calculated in cases where zip code is unknown or outside San Diego County.



Stroke Death Rates, 2001

1.0 - 40.0

40.1 - 80.0

80.1 - 120.0

120.1 - 160.0

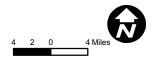
120.1 - 100.0

160.1 - 200.0

Data not shown

HHSA Region











Map Date: September, 2010 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429

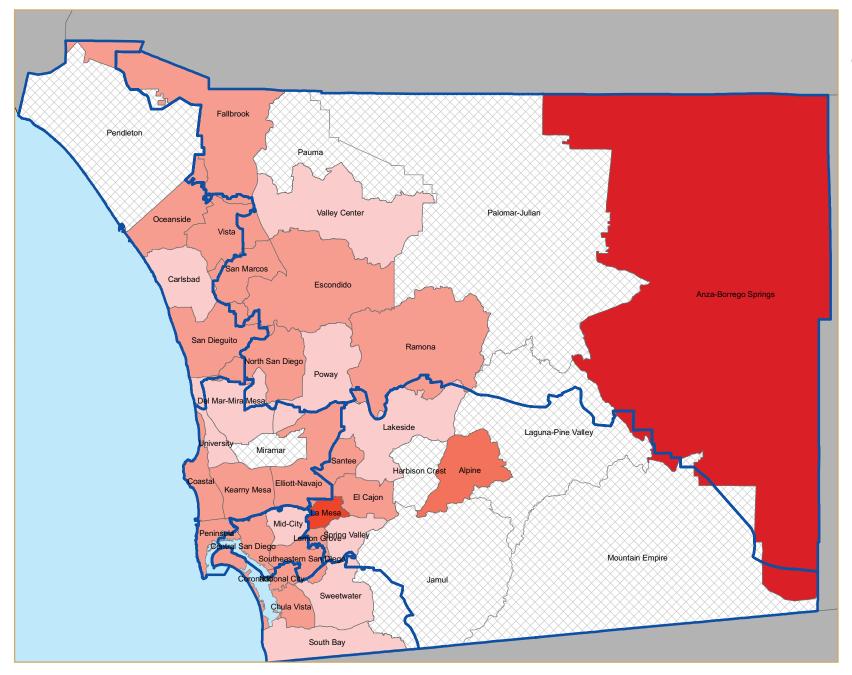
NAD\_1983\_StatePlane\_California\_VI\_FIPS\_0406\_Feet, D\_North\_American\_1983, Foot\_US

Source: Death Statistical Master Files (CA DPH), County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch; SANDAG, Current Population Es imates, 4/24/2009.

<sup>\*</sup> Rates per 100,000 population.

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<sup>§</sup> Rates not calculated for fewer than 5 events. Rates not calculated in cases where zip code is unknown or outside San Diego County.



Stroke Death Rates, 2002

1.0 - 40.0

40.1 - 80.0

80.1 - 120.0

120.1 - 160.0

120.1 - 100.0

160.1 - 200.0

Data not shown

HHSA Region











Map Date: September, 2010 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429

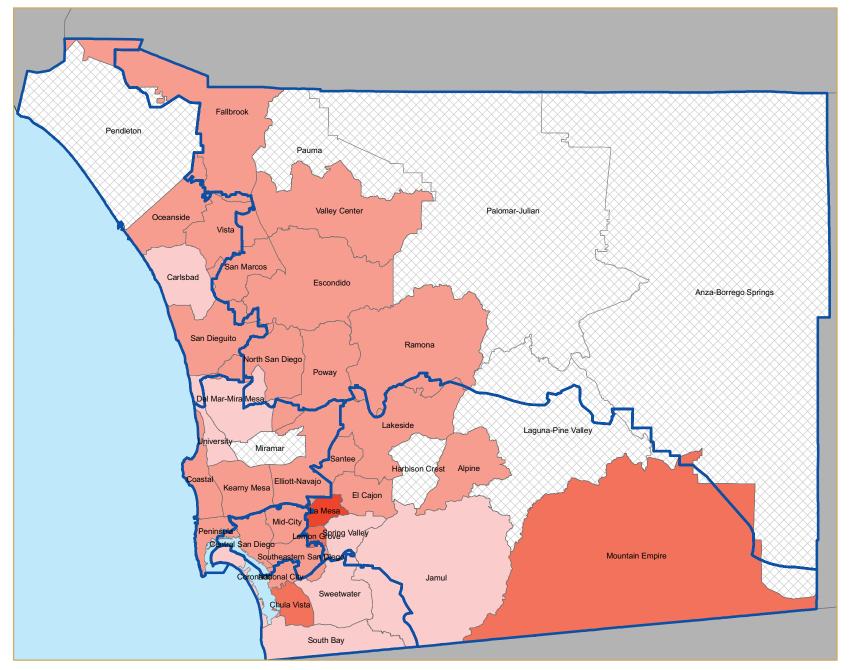
NAD\_1983\_StatePlane\_California\_VI\_FIPS\_0406\_Feet, D\_North\_American\_1983, Foot\_US

Source: Death Statistical Master Files (CA DPH), County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 4/24/2009.

<sup>\*</sup> Rates per 100,000 population.

<sup>†</sup> Stroke death refers to (underlying cause of death) ICD-10 codes I60-I69. Stroke is sometimes referred to as Cerebrovascular disease.

<sup>§</sup> Rates not calculated for fewer than 5 events. Rates not calculated in cases where zip code is unknown or outside San Diego County.



Stroke Death Rates, 2003

1.0 - 40.0

40.1 - 80.0

80.1 - 120.0

120.1 - 160.0

120.1 - 100.0

160.1 - 200.0

Data not shown

HHSA Region











Map Date: September, 2010 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429

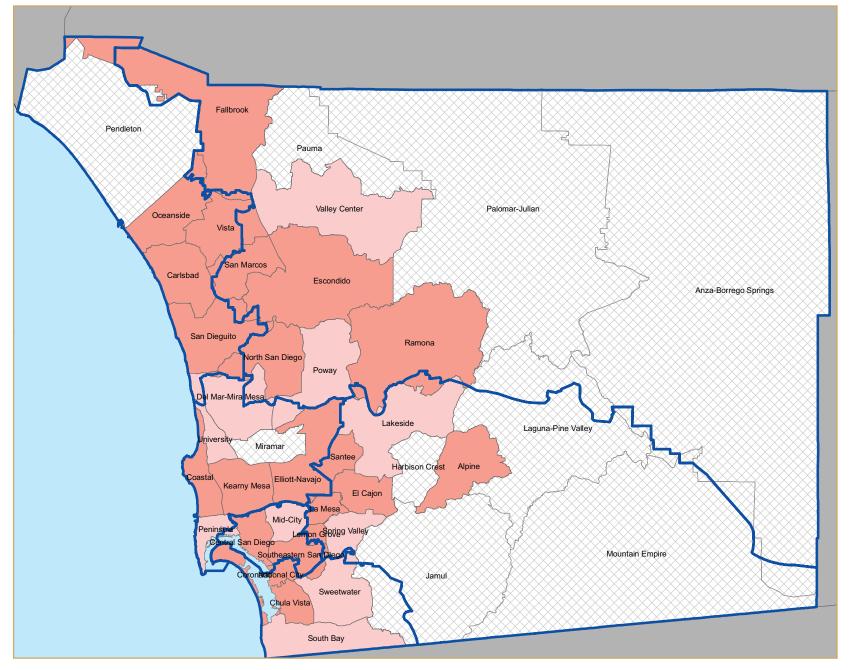
NAD\_1983\_StatePlane\_California\_VI\_FIPS\_0406\_Feet, D\_North\_American\_1983, Foot\_US

Source: Death Statistical Master Files (CA DPH), County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 4/24/2009.

<sup>\*</sup> Rates per 100,000 population.

<sup>†</sup> Stroke death refers to (underlying cause of death) ICD-10 codes I60-I69. Stroke is sometimes referred to as Cerebrovascular disease.

<sup>§</sup> Rates not calculated for fewer than 5 events. Rates not calculated in cases where zip code is unknown or outside San Diego County.



Stroke Death Rates, 2004

1.0 - 40.0

40.1 - 80.0

80.1 - 120.0

120.1 - 160.0

160.1 - 200.0

Data and about

Data not shown

HHSA Region











Map Date: September, 2010 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429

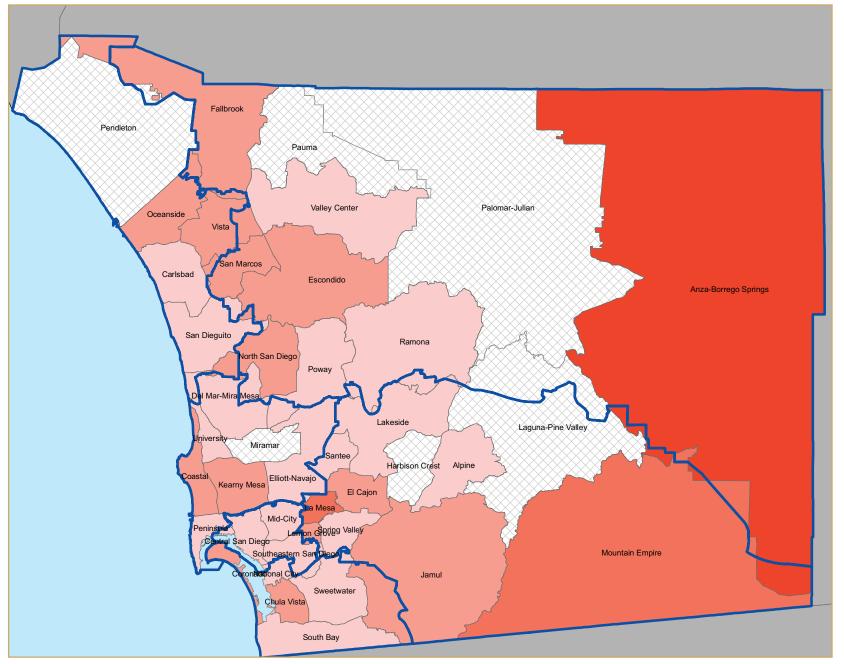
NAD\_1983\_StatePlane\_California\_VI\_FIPS\_0406\_Feet, D\_North\_American\_1983, Foot\_US

Source: Death Statistical Master Files (CA DPH), County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 4/24/2009.

<sup>\*</sup> Rates per 100,000 population.

<sup>†</sup> Stroke death refers to (underlying cause of death) ICD-10 codes I60-I69. Stroke is sometimes referred to as Cerebrovascular disease.

<sup>§</sup> Rates not calculated for fewer than 5 events. Rates not calculated in cases where zip code is unknown or outside San Diego County.



Stroke Death Rates, 2005

1.0 - 40.0

40.1 - 80.0

80.1 - 120.0

120.1 - 160.0

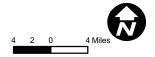
120.1 - 100.0

160.1 - 200.0

Data not shown

HHSA Region











Map Date: September, 2010 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429

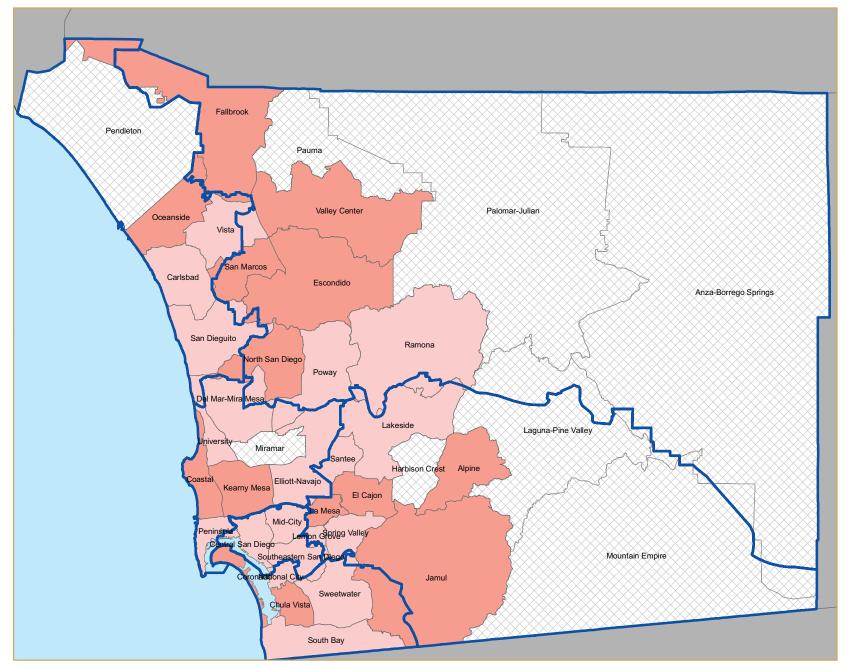
NAD\_1983\_StatePlane\_California\_VI\_FIPS\_0406\_Feet, D\_North\_American\_1983, Foot\_US

Source: Death Statistical Master Files (CA DPH), County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch; SANDAG, Current Population Es imates, 4/24/2009.

<sup>\*</sup> Rates per 100,000 population.

<sup>†</sup> Stroke death refers to (underlying cause of death) ICD-10 codes I60-I69. Stroke is sometimes referred to as Cerebrovascular disease.

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Stroke Death Rates, 2006

1.0 - 40.0

40.1 - 80.0

80.1 - 120.0

120.1 - 160.0

160.1 - 200.0

Data not shown

HHSA Region











Map Date: September, 2010 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429

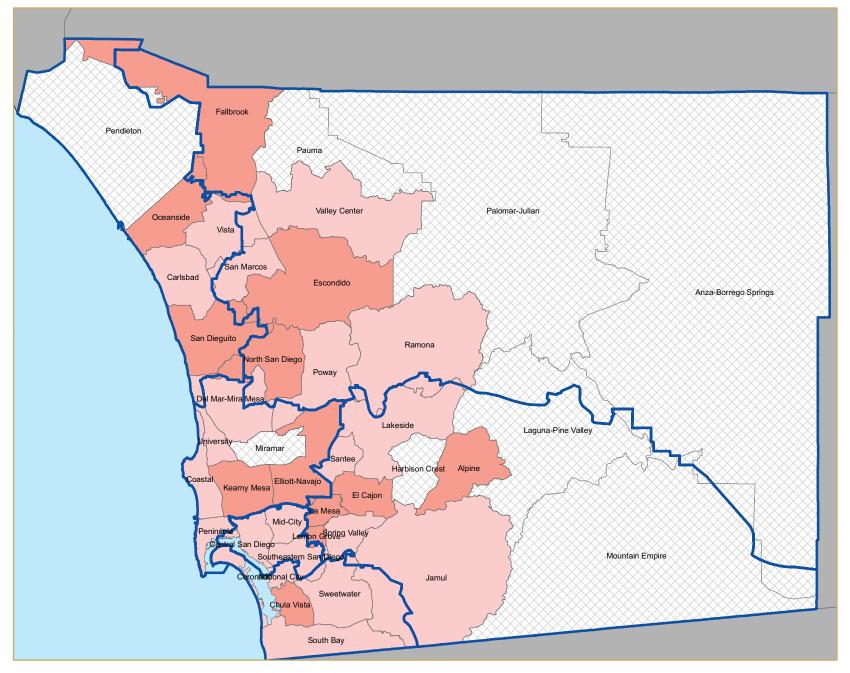
NAD\_1983\_StatePlane\_California\_VI\_FIPS\_0406\_Feet, D\_North\_American\_1983, Foot\_US

Source: Death Statistical Master Files (CA DPH), County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 4/24/2009

<sup>\*</sup> Rates per 100,000 population.

<sup>†</sup> Stroke death refers to (underlying cause of death) ICD-10 codes I60-I69. Stroke is sometimes referred to as Cerebrovascular disease.

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Stroke Death Rates, 2007

1.0- 40.0

40.1 - 80.0

80.1 - 120.0

120.1 - 160.0

160.1 - 200.0

Data not shown

HHSA Region











Map Date: September, 2010 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429

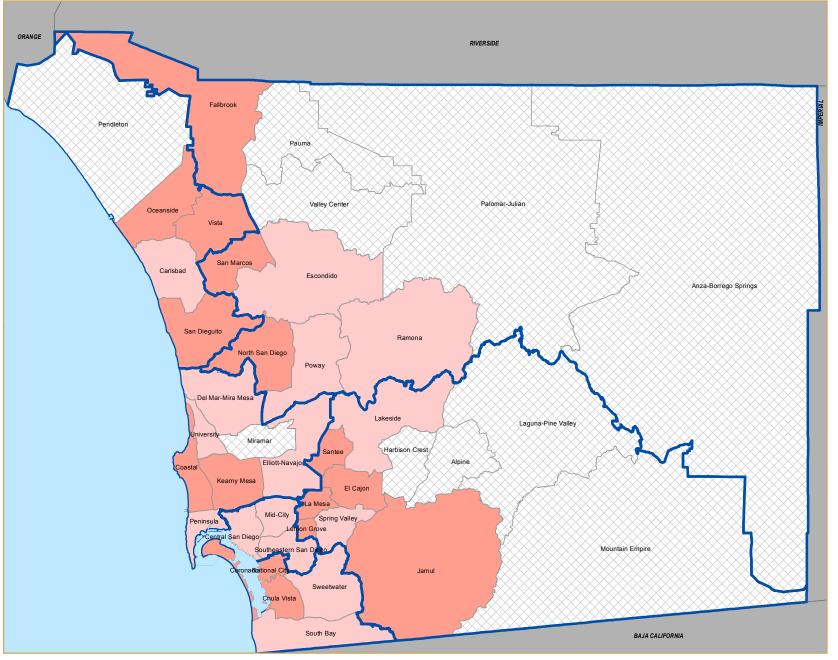
NAD\_1983\_StatePlane\_California\_VI\_FIPS\_0406\_Feet, D\_North\_American\_1983, Foot\_US

Source: Death Statistical Master Files (CA DPH), County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 4/24/2009.

<sup>\*</sup> Rates per 100,000 population.

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<sup>§</sup> Rates not calculated for fewer than 5 events. Rates not calculated in cases where zip code is unknown or outside San Diego County.



Chronic Disease Outcome Rates by Subregional Area (SRA) in San Diego County

Stroke Death Rates, 2008

1.0 - 40.0

40.1 - 80.0

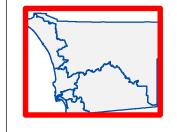
80.1 - 120.0

120.1 - 160.0

160.1 - 200.0

Data not shown

Region











Source: Death Statistical Master Files (CA DPH), County of San Diego, Health & Human Services Agency, Epidemiology & Immunizat ion Services Branch; SANDAG, Current Population Estimates, 10/2010.

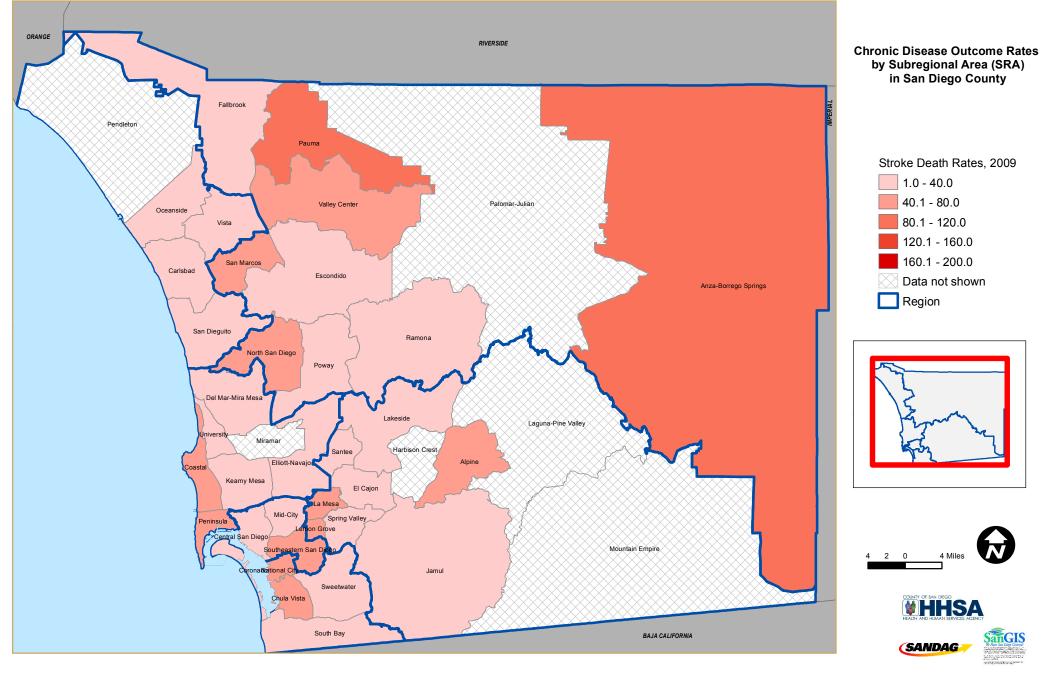
Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 04/2012.

Map Date: June, 2012 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429

<sup>\*</sup> Rates per 100,000 population.

<sup>†</sup> Stroke death refers to (underlying cause of death) ICD -10 codes I60-I69. Stroke is sometimes referred to as Cerebrovascular disease.

<sup>§</sup> Rates not calculated for fewer than 5 events. Rates not calculated in cases where zip code is unknown or outside San Diego County



<sup>\*</sup> Rates per 100,000 population.

Source: Death Statistical Master Files (CA DPH), County of San Diego, Health & Human Services Agency, Epidemiology & Immunizat ion Services Branch; SANDAG, Current Population Estimates, 10/2010.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 04/2012.

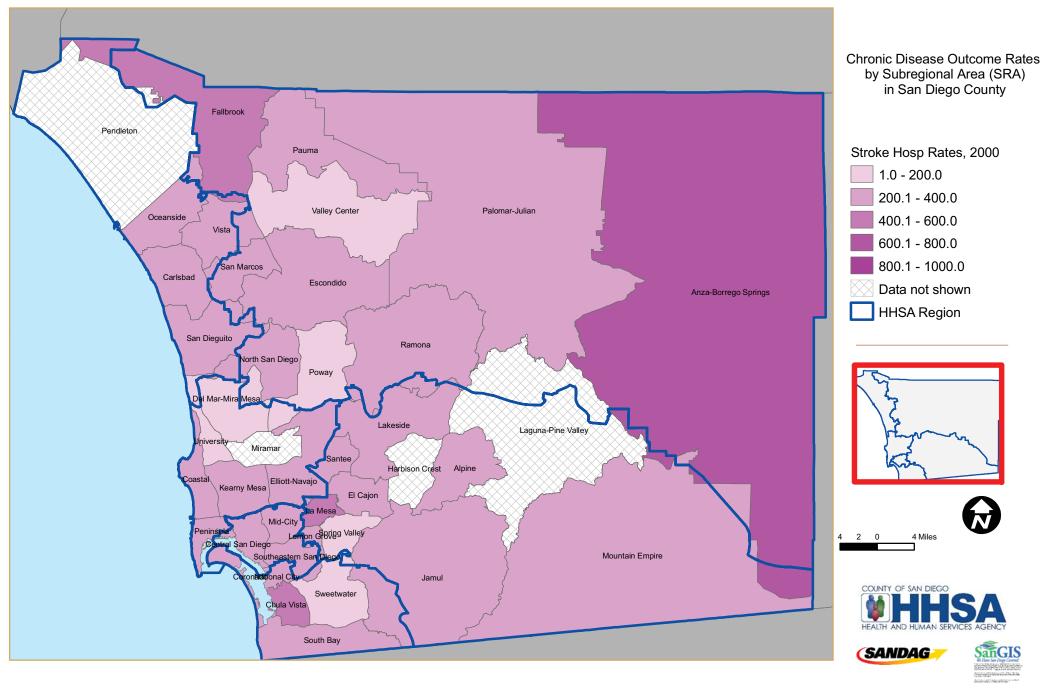
Map Date: June, 2012 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429

<sup>†</sup> Stroke death refers to (underlying cause of death) ICD -10 codes I60-I69. Stroke is sometimes referred to as Cerebrovascular disease.

<sup>§</sup> Rates not calculated for fewer than 5 events. Rates not calculated in cases where zip code is unknown or outside San Diego County.

### Stroke Hospitalization Rates Among San Diego County Residents by Subregional Area

Maps by Year:



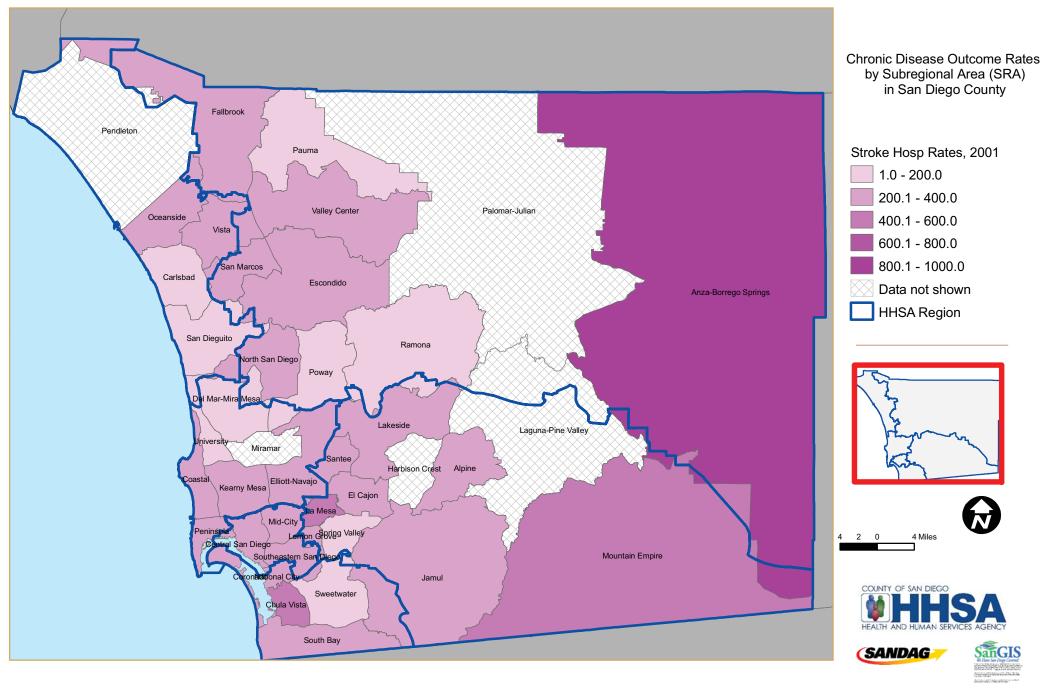
<sup>\*</sup> Rates per 100,000 population.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 9/10/2010.

<sup>†</sup> Stroke hospitalization refers to (principal diagnosis) ICD 9 codes 430-438. Stroke is sometimes referred to as Cerebrovascular disease.

<sup>§</sup> Rates not calculated for fewer than 5 events. Rates not calculated in cases where zip code is unknown or outside San Diego County.

Map Date: September, 2010 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429



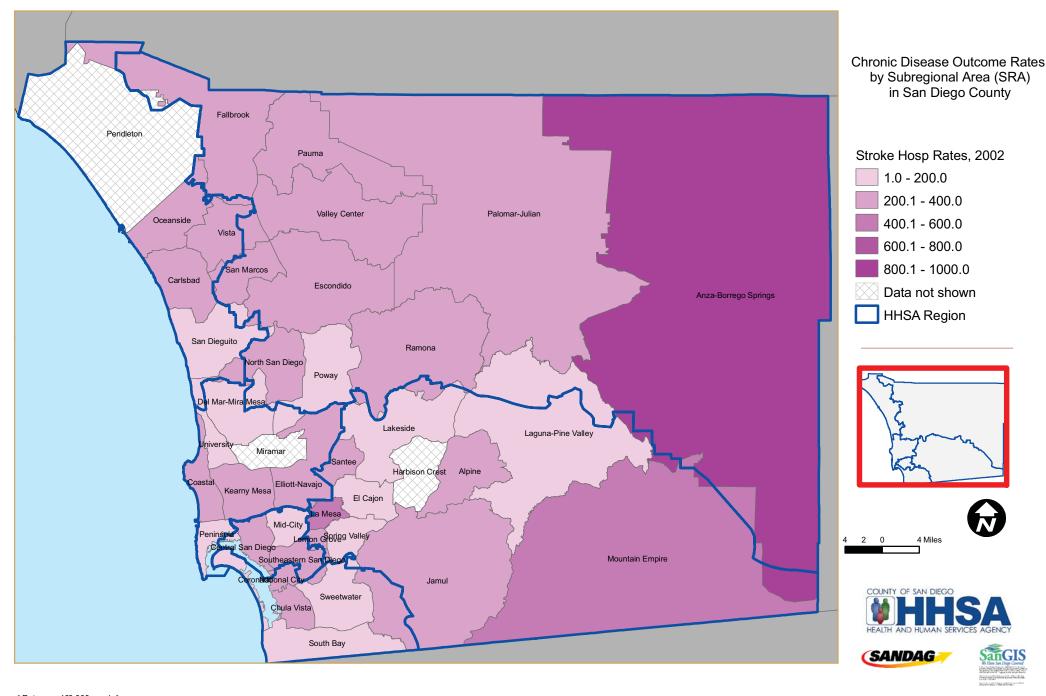
<sup>\*</sup> Rates per 100,000 population.

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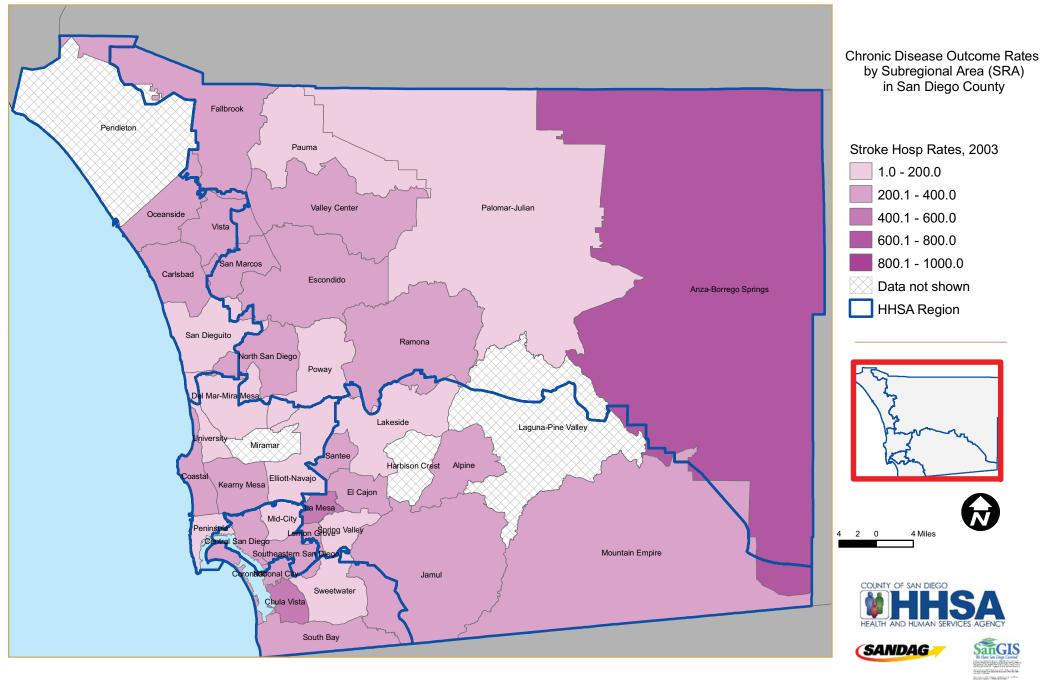
<sup>\*</sup> Rates per 100,000 population.

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Map Date: September, 2010 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429



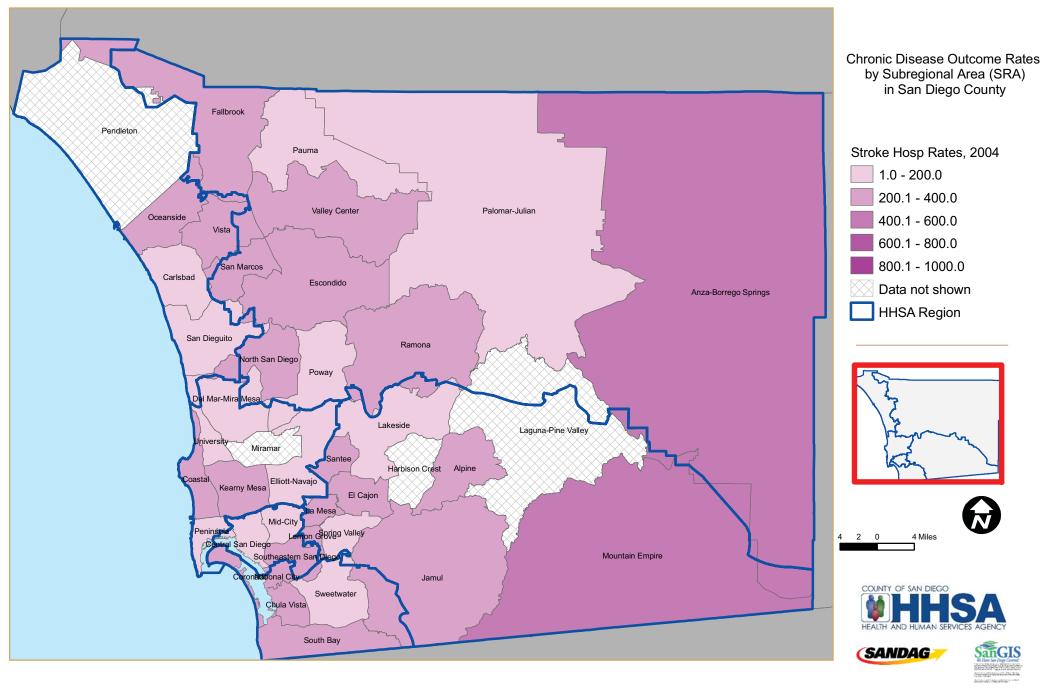
<sup>\*</sup> Rates per 100,000 population.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 9/10/2010.

<sup>†</sup> Stroke hospitalization refers to (principal diagnosis) ICD 9 codes 430-438. Stroke is sometimes referred to as Cerebrovascular disease.

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Map Date: September, 2010 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429



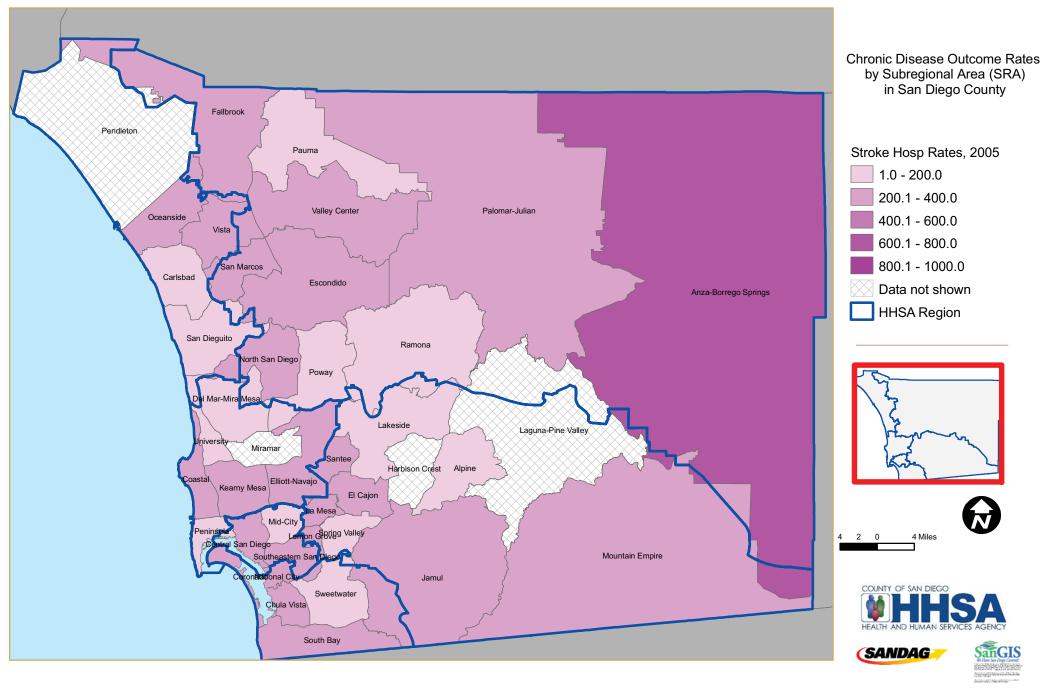
<sup>\*</sup> Rates per 100,000 population.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 9/10/2010.

<sup>†</sup> Stroke hospitalization refers to (principal diagnosis) ICD 9 codes 430-438. Stroke is sometimes referred to as Cerebrovascular disease.

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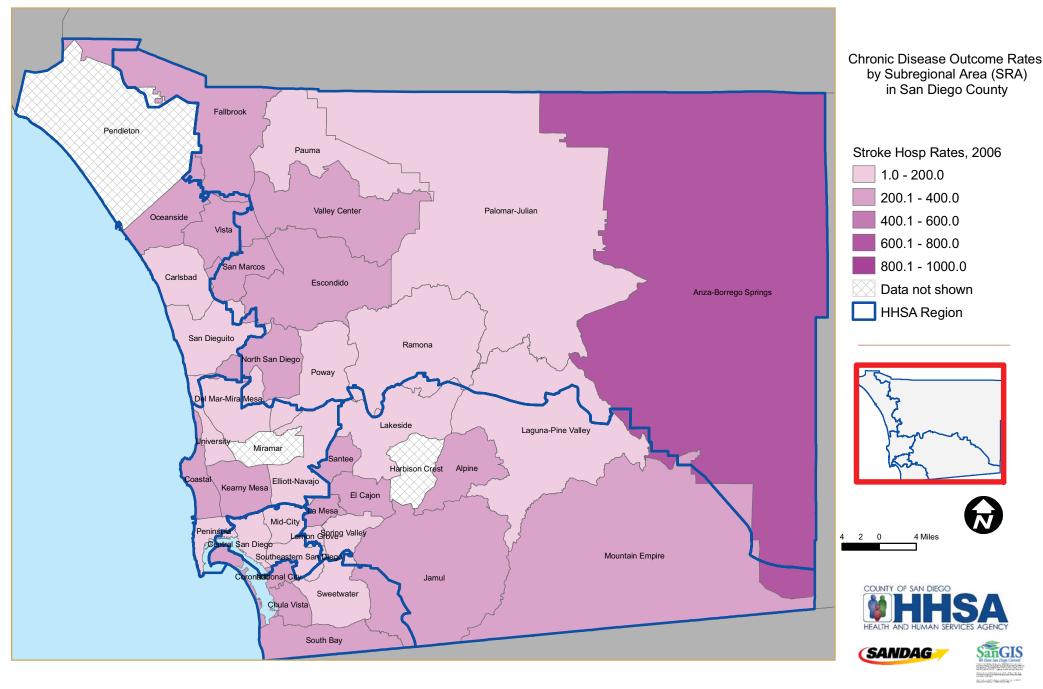
<sup>\*</sup> Rates per 100,000 population.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 9/10/2010.

<sup>†</sup> Stroke hospitalization refers to (principal diagnosis) ICD 9 codes 430-438. Stroke is sometimes referred to as Cerebrovascular disease.

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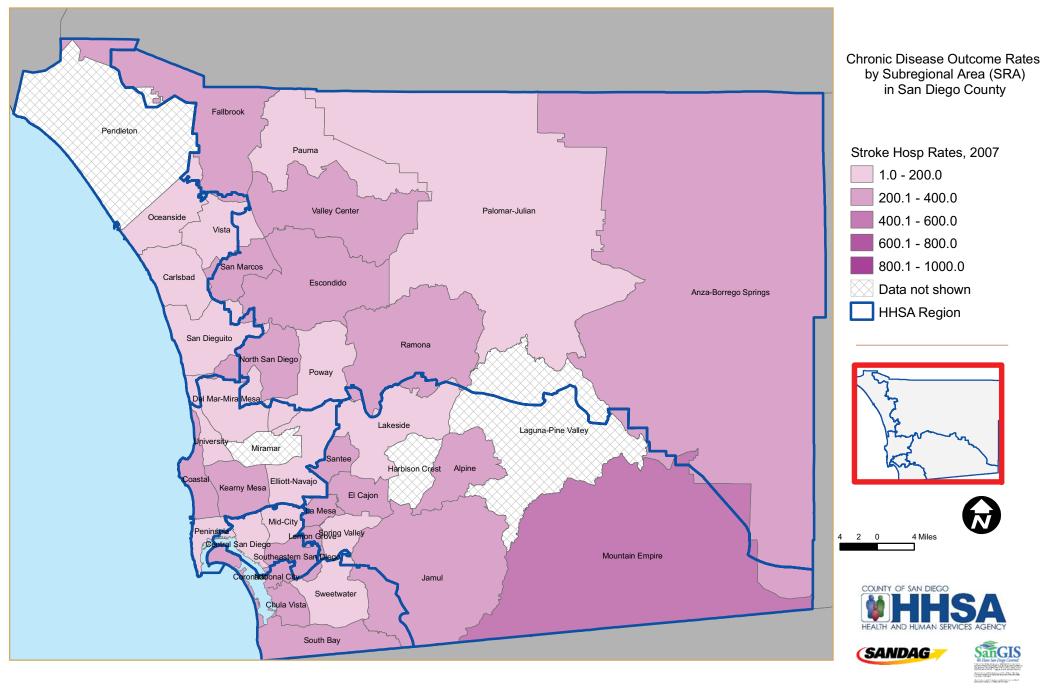
<sup>\*</sup> Rates per 100,000 population.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 9/10/2010.

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Map Date: September, 2010 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429



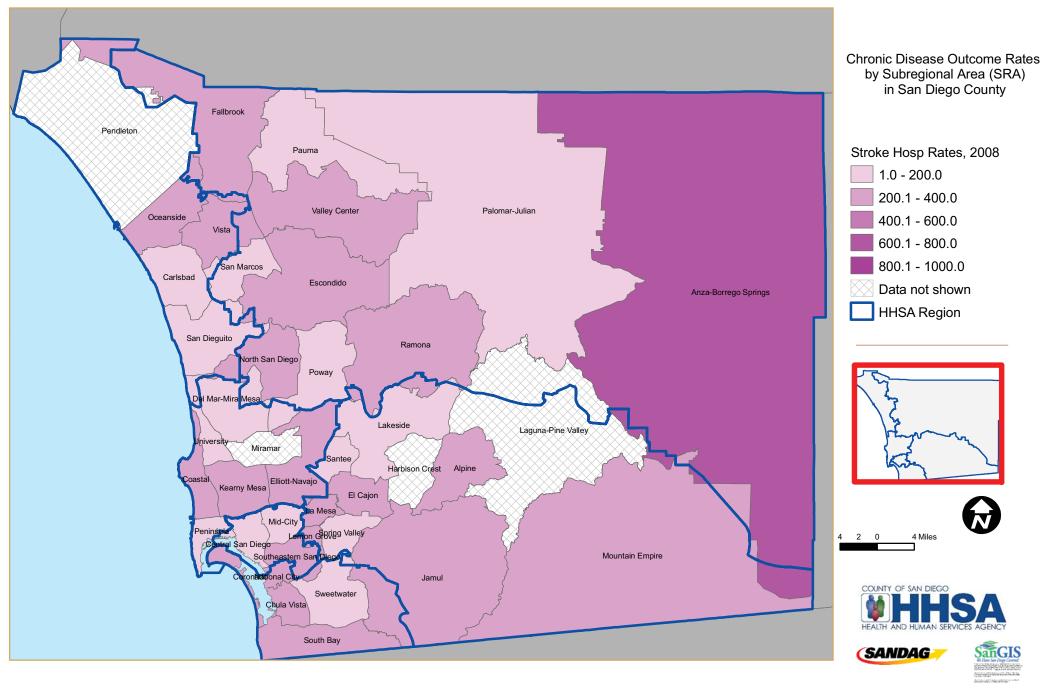
<sup>\*</sup> Rates per 100,000 population.

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<sup>†</sup> Stroke hospitalization refers to (principal diagnosis) ICD 9 codes 430-438. Stroke is sometimes referred to as Cerebrovascular disease.

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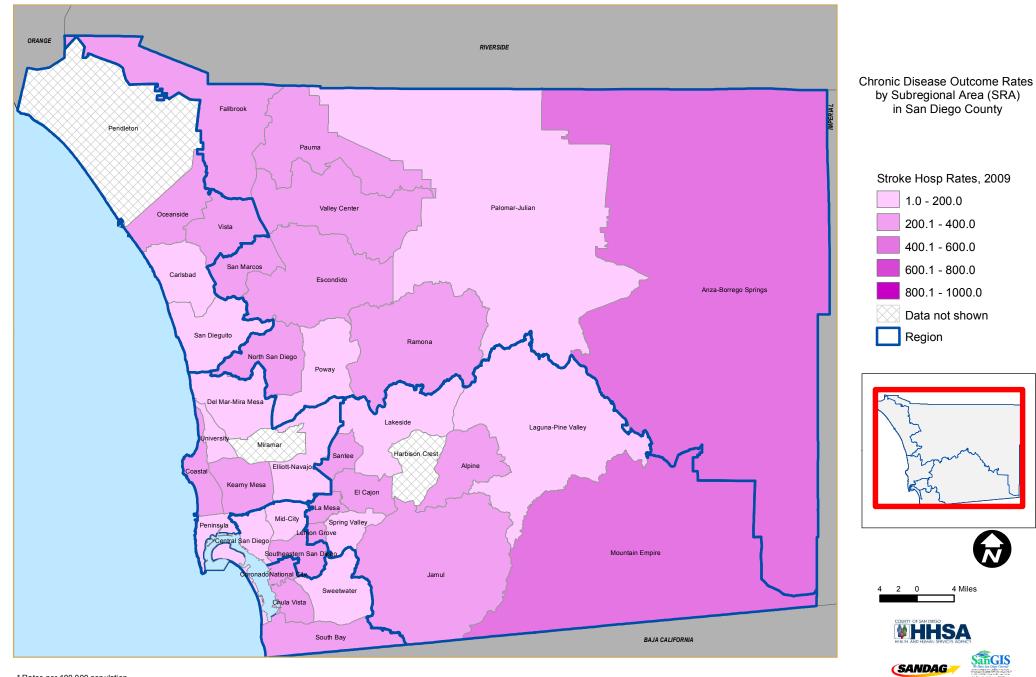
<sup>\*</sup> Rates per 100,000 population.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 9/10/2010.

<sup>†</sup> Stroke hospitalization refers to (principal diagnosis) ICD 9 codes 430-438. Stroke is sometimes referred to as Cerebrovascular disease.

<sup>§</sup> Rates not calculated for fewer than 5 events. Rates not calculated in cases where zip code is unknown or outside San Diego County.

Map Date: September, 2010 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429



<sup>\*</sup> Rates per 100,000 population.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 04/2012.

Map Date: June, 2012 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429

<sup>†</sup> Stroke hospitalization refers to (principal diagnosis) ICD-9 codes 430-438. Stroke is sometimes referred to as Cerebrovascular disease.

<sup>§</sup> Rates not calculated for fewer than 5 events. Rates not calculated in cases where zip code is unknown or outside San Diego County.

## Stroke Emergency Department Discharge Rates Among San Diego County Residents by Subregional Area

Maps by Year:

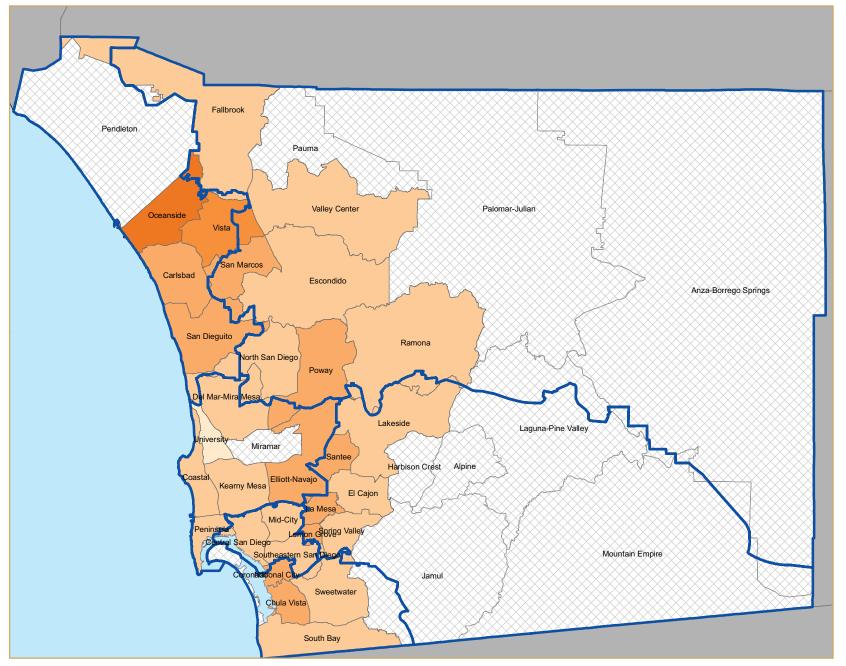
2006

2007

2008

2009

Note: ED Discharge data is a new database. 2006 is first year of available data.



Stroke ED Rates, 2006

1.0 - 20.0

20.1 - 40.0

40.1 - 60.0

60.1 - 80.0

80.1 - 100.0

Data not shown

HHSA Region











Source: HASD&IC, CHIP, County of San Diego, Health & Human Services Agency, Emergency Medical Services, Emergency Department Database; SANDAG, Current Population Estimates, 4/24/2009.

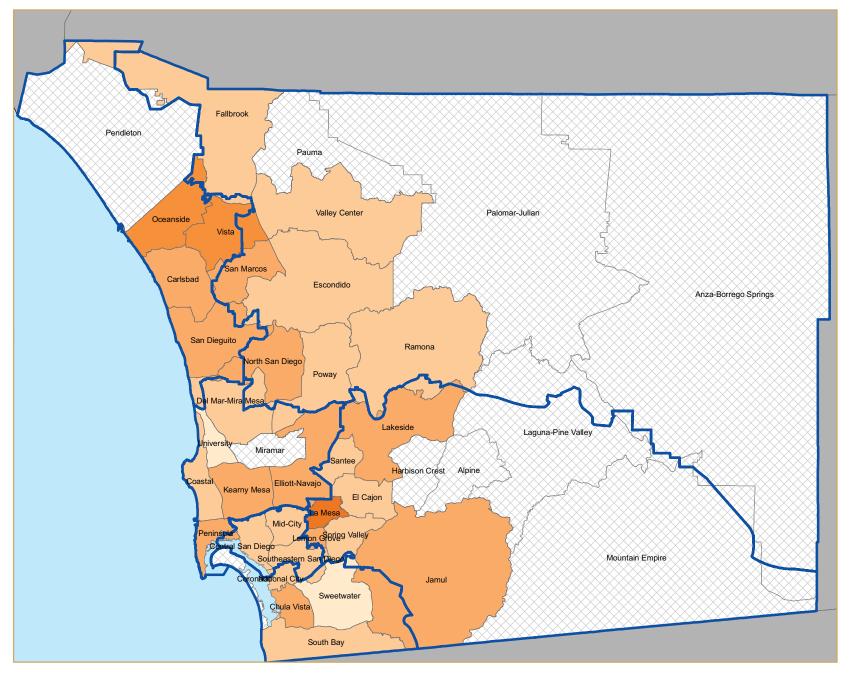
Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 9/10/2010.

Map Date: September, 2010 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429

<sup>\*</sup> Rates per 100,000 population.

<sup>†</sup> Stroke emergency department discharge refers to (principal diagnosis) ICD-9 codes 430-438. Stroke is sometimes referred to as Cerebrovascular disease.

<sup>§</sup> Rates not calculated for fewer than 5 events. Rates not calculated in cases where zip code is unknown or outside San Diego County.



Stroke ED Rates, 2007

1.0 - 20.0

20.1 - 40.0

40.1 - 60.0

60.1 - 80.0

80.1 - 100.0

Data not shown

HHSA Region











† Stroke emergency department discharge refers to (principal diagnosis) ICD-9 codes 430-438. Stroke is sometimes referred to as Cerebrovascular disease.

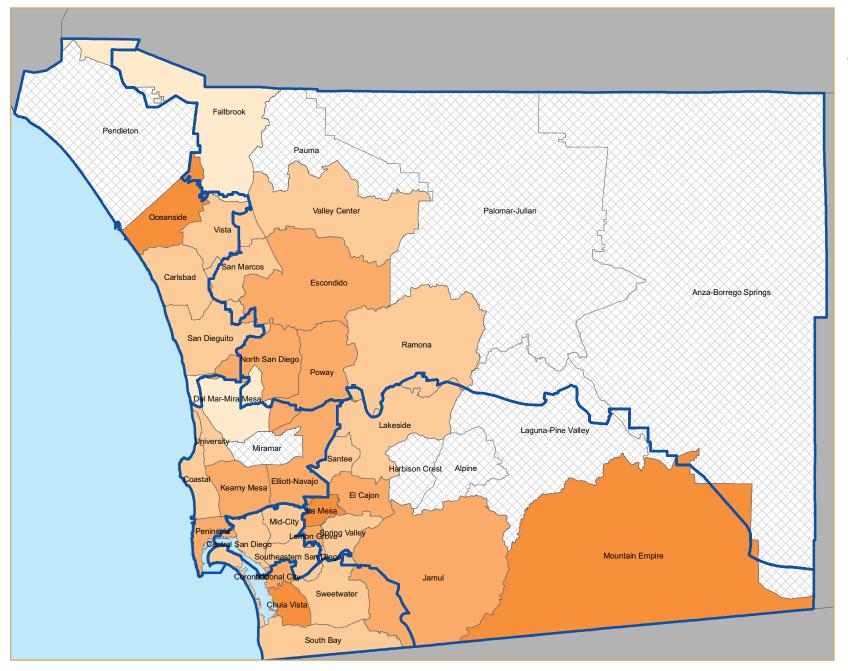
§ Rates not calculated for fewer than 5 events. Rates not calculated in cases where zip code is unknown or outside San Diego County.

Source: HASD&IC, CHIP, County of San Diego, Health & Human Services Agency, Emergency Medical Services, Emergency Department Database; SANDAG, Current Population Estimates, 4/24/2009.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 9/10/2010.

\* Rates per 100,000 population.

Map Date: September, 2010 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429



Stroke ED Rates, 2008

1.0 - 20.0

20.1 - 40.0

20.1 - 40.0

40.1 - 60.0

60.1 - 80.0

80.1 - 100.0

Data not shown

HHSA Region











Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429

Map Date: September, 2010

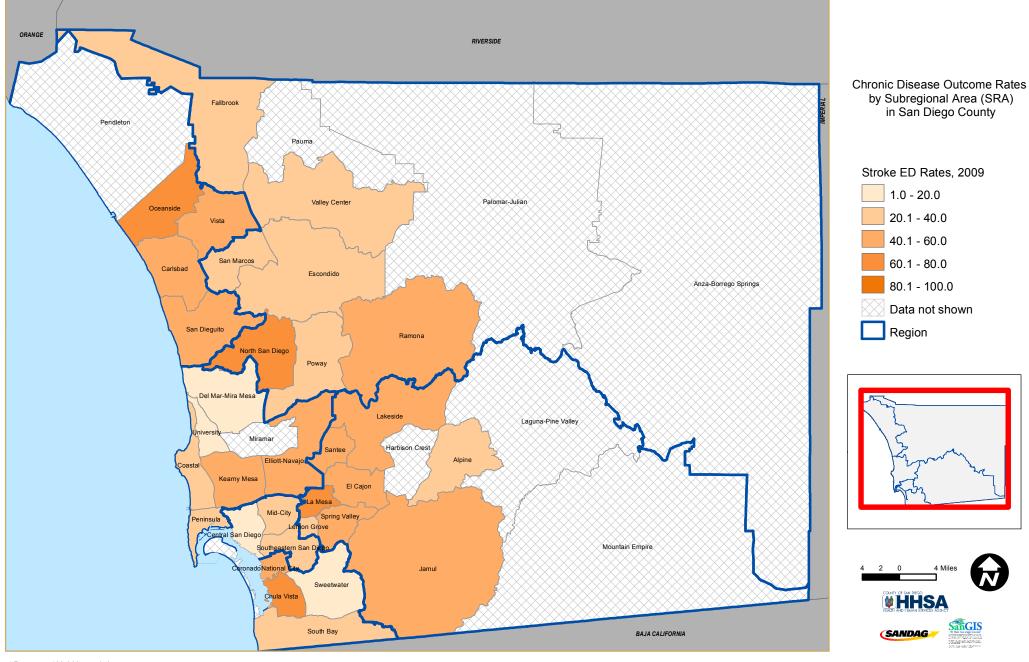
NAD\_1983\_StatePlane\_California\_VI\_FIPS\_0406\_Feet, D\_North\_American\_1983, Foot\_US

Source: HASD&IC, CHIP, County of San Diego, Health & Human Services Agency, Emergency Medical Services, Emergency Department Database; SANDAG, Current Population Estimates, 4/24/2009.

<sup>\*</sup> Rates per 100,000 population.

<sup>†</sup> Stroke emergency department discharge refers to (principal diagnosis) ICD-9 codes 430-438. Stroke is sometimes referred to as Cerebrovascular disease.

<sup>§</sup> Rates not calculated for fewer than 5 events. Rates not calculated in cases where zip code is unknown or outside San Diego County.



<sup>\*</sup> Rates per 100,000 population.

Source: HASD&IC, CHIP, County of San Diego, Health & Human Services Agency, Emergency Medical Services, Emergency Department Database; SANDAG, Current Population Estimates, 10/2010.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 4/2012.

Map Date: June, 2012 Contact: Isabel Corcos or Leslie Ray, County of San Diego Emergency Medical Services 619.285.6429

<sup>†</sup> Stroke emergency department discharge refers to (principal diagnosis) ICD-9 codes 430-438. Stroke is sometimes referred to as Cerebrovascular disease.

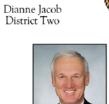
<sup>§</sup> Rates not calculated for fewer than 5 events. Rates not calculated in cases where zip code is unknown or outside San Diego County.

### San Diego County Board of Supervisors





Pam Slater-Price District Three



Ron Roberts District Four



Bill Horn District Five

**Chief Administrative Officer** Walter F. Ekard

Assistant Chief Administrative Officer Helen Robbins-Meyer

**General Managers** 

Mikel D. Haas	Don Steuer	Nick Macchione	Sarah E. Aghassi	Ron Lane
General Manager	Chief Financial	Agency Director	General Manager	General Manager
Community	Officer/General	Health and	Land Use &	Public Safety
Services Group	Manager Finance	Human Services	Environment	Group
	&	Agency	Group	
	General			
	Government			
	Group			

